matters. They simply resort to a sleight of hand by which they equate "telephone exchange service" with "local telecommunications traffic." Typical in this regard are the comments of ICG. ICG states that "[t]he Commission has interpreted Section 251(b)(5) to only apply to local traffic – 'telephone exchange service' traffic as defined by the Act."[44] It cites paragraphs 1033 and 1034 in support of this statement. But, as noted, those paragraphs do not even mention the term "telephone exchange service." ICG's argument – and the similar arguments of other CLECs[45] – are just "smoke and mirrors," an obvious attempt to switch the debate from the meaning of "local telecommunications traffic" to the meaning of "telephone exchange service."

The D.C. Circuit failed to see through the smoke in the *Remand Order*. The Commission should make sure that the court is not fooled again.

4. None of the Other CLEC Arguments Has Merit

In addition to the above arguments, CLECs make a number of other miscellaneous arguments. Some argue that telecommunications services and information services are mutually exclusive regulatory classifications, and so telecommunications must necessarily terminate when an information service begins. Several also point to certain technical characteristics of ISP traffic in support of their argument that ISP traffic is like local traffic and that it terminates at the ISP server. Global NAPs rehashes its claim that the Act recognizes a distinction between a

---

calling party and an information service provided by the called party – that are provided by different entities with different business and subject to different regulatory treatment." *Id.* The short answer to this contention is that, if this theory were correct, the access provided to IXCs also would not be "exchange access" because the long-distance service that follows is a different service, provided by a different entity with a different business and that is subject to different regulatory treatment.

44 ICG Comments at 4.

45 *See, e.g.,* Global NAPs Comments at 7.

"call" and a "communication," and that ISP calls terminate at the ISP server, while Internet communications do not. Some CLECs even try to make policy arguments grounded in economics. All of these arguments are wholly lacking in merit and should be rejected.

a. The Status of ISPs as Information Service Providers is Irrelevant

In its Comments, SBC explained in detail why the status of ISPs as information service providers is irrelevant to whether telecommunications terminates at the ISP server. The CLECs, of course, argue to the contrary. SBC addressed the CLEC arguments in full in its Comments, and sees no reason to repeat those points here. It does, however, wish to emphasize a few additional points in response to the CLEC arguments.

Virtually all of the CLECs that tout the distinction between information services and telecommunications services rely heavily on the Commission's determination in the *Universal Service Report* that information services and telecommunications services are mutually exclusive categories.[46] They claim that because these categories are mutually exclusive, telecommunications must end when an information service begins.

This is a distortion of the *Universal Service Report.* In concluding that information services and telecommunications services are mutually exclusive categories, the Commission held simply that the provider of an information service would not be deemed a provider of a telecommunications service simply because of the fact that its information service was provided via telecommunications. As stated in the *Universal Service Report:*

> Because information services are offered "via telecommunications," they necessarily require a transmission component in order for users to access information. Accordingly, if we interpreted the statute as breaking down the

---

[46] *See Federal-State Joint Board on Universal Service,* 13 FCC Rcd 11501 (1998) at paras. 56-60.

> distinction between information services and telecommunications services, so that some information services were classed as telecommunications services, it would be difficult to devise a sustainable rationale under which all, or essentially all, information services did not fall into the telecommunications services category.[47]

In so holding, the Commission in no way suggested that the telecommunications services underlying information services do not exist. To the contrary, despite holding that ISPs do not generally *provide* telecommunications services, the Commission expressly recognized that they *use* telecommunications to transmit information between their customers and remote Internet web sites. Underscoring the Commission's recognition of this use as a discrete and cognizable service, the Commission noted that the providers of these telecommunications services would be required to contribute to universal service mechanisms.[48] Indeed, it even left open the possibility that the ISP itself might be required to contribute to universal service support to the extent it provided its own backbone services.[49] Obviously, if telecommunications terminated when an information service begins, the telecommunications services underlying information services would not be subject to universal service funding requirements. Far from supporting the CLECs' arguments, the *Universal Service Report* refutes them.[50]

---

47 *Id.* at para. 57.

48 *Id.* at para. 66.

49 *Id.* at paras. 69-70.

50 WorldCom also purports to find support for its position in the 11th Circuit's holding that the FCC lacks authority to regulate the rent for a pole attachment used to provide Internet service because Internet service is neither a cable service nor a telecommunications service. WorldCom Comments at 20, *citing Gulf Power v. FCC,* 208 F.3d 1263, 1276-78 (11th Cir. 2000). This has no relevance here because it is undisputed that that Internet service *is* a telecommunications service. Indeed, the FCC did not argue that it was a telecommunications service in that case.

It also bears mention that, since the adoption of the Part 69 access charge regime in 1983, the Commission has consistently recognized that LECs provide *access services* when they deliver traffic from an end user to an information or enhanced service provider.[51] Access service is, by definition, "services and facilities provided for the origination and termination of any interstate or foreign telecommunication."[52] Thus, in recognizing that telecommunications sent to an ISP or ESP is access traffic, the Commission necessarily has recognized that this telecommunications does not terminate at the ISP server.[53]

b. The Technical Similarities Between ISP Traffic and Local Traffic Are Irrelevant.

Some CLECs point to various characteristics of ISP traffic in a futile effort to shore up their argument that such traffic is local or that it terminates at the ISP server. They note, for example, that end users may dial a seven-digit number to reach their ISP, and that LECs use

---

Rather, it argued that Internet service provided by a cable television system fits the definition of cable service.

[51] *See, e.g., MTS and WATS Market Structure,* 97 FCC 2d 682, 711 (1983) ("[A]mong the variety of users of access services are ... enhanced service provider[.]") *See also GTE Telephone Operating Companies, GTOC Tariff No. 1, GTOC Transmittal 1148,* Memorandum Opinion and Order, CC Docket No. 98-79, released Oct. 30, 1998 at para. 21: ("That the Commission exempted ESPs from access charges indicates its understanding that they in fact use interstate access service; otherwise, the exemption would not be necessary.") *And see National Association of Regulatory Utility Commissioners v. FCC,* 737 F.2d 1095, 1136 (D.C. Cir. 1984) ("[t]he access charges paid by ...ESPs may thus not fully reflect their relative use of exchange access.")

[52] 47 CFR § 69.2(b).

[53] *See also Filing and Review of Open Network Architecture Plans,* 4 FCC Rcd 1 (1988) at para. 274 ("the addition of the specified types of enhancements ... to a basic service neither changes the nature of the underlying basic service when offered by a common carrier nor alters the carrier's tariffing obligations, whether federal or state, with respect to that service.")

local interconnection trunks and signaling associated with local calls to deliver traffic to ISPs. These observations, though, prove nothing. LECs deliver ISP traffic over local interconnection trunks for the simple reason that callers use local telephone numbers to access ISPs, and LECs cannot distinguish between ISP traffic and local traffic on a real-time basis. ISP traffic, however, is not unique in this regard. ILECs also transmit Feature Group A access traffic over local interconnection trunks and use signaling associated with local calls. In addition, LECs use local interconnection trunks to the extent they terminate interstate calls using remote call forwarding interim number portability arrangements, to customers that have ported their telephone number to a CLEC. Clearly, the fact that local interconnection trunks are used in these instances does not render the traffic that is carried "local traffic."

Some CLECs argue that ISP traffic must "terminate" at the ISP server because answer supervision is returned to the ILEC at that point.[54] They claim that answer supervision is widely recognized in the industry as clear indicia that a call has been terminated. WorldCom claims, conversely, that ISP traffic could not terminate on the Internet because ILECs do not receive notice of call completion from the ISP.[55] These arguments too are frivolous. Answer supervision is returned, not only on calls to ISPs, but on foreign exchange (FX) calls and Off Net Access Lines (ONAL) traffic. It is also returned on long-distance calls using Telecommunications Relay Service (TRS) and by an IXC that receives certain types of access code calls at an operator service platform. It is not returned, however, when that IXC delivers that operator service call to the called party. Thus, if as these CLECs claim, answer supervision

---

[54] Pac-West Comments at 14; Focal Comments at 9.

[55] WorldCom Comments at 24.

is the "industry standard" indicia of call termination, then FX calls, ONAL traffic, and long-distance calls placed via TRS and through use of a calling cards would all be "local calls. " Obviously, that is not the case. Thus, the fact that answer supervision is or is not returned is not dispositive of where and whether a call has been terminated.

Pac-West also makes much of the fact that an Internet subscriber's logon and password must be authenticated before that user obtains Internet connectivity.[56] That process, however, is directly analogous to the process that takes place on operator-assisted long-distance calls, such as calling card calls. It in no way supports Pac-West's claim that "an ISP call does not have the same end-to-end characteristic of a typical long distance call."

Pac-West also attaches to its Comments testimony that it submitted to the California Public Utilities Commission. While Pac-West does not discuss that testimony in its Comments except in connection with its arguments about answer supervision and the authentication process, it is interesting to note that the thrust of the testimony is that a dial-up connection to the Internet is not jurisdictionally interstate. In particular, Pac-West purports to argue that very little Internet traffic generated by a dial-up connection crosses state boundaries.[57] Aside from the fact that this argument confuses the concepts of bandwidth and actual usage and is thus flawed, it is inconsistent with Pac-West's concession in its comments that ISP access is indeed jurisdictionally interstate.[58]

---

56 Pac-West Comments at 13.

57 *Id.,* Attachment A.

58 Pac-West Comments at 4-7. Pac-West's Attachment also argues that because some ISP traffic is not actually sent to the Internet, that traffic is not jurisdictionally interstate. But Pac-West concedes that such traffic does not terminate at the ISP modem bank when it describes the

c. There is no Statutory Distinction Between a Call and a Communication

In a particularly wild flight of fancy, Global NAPs maintains that the 1996 Act recognizes a distinction between a "call" and a "communication." It claims that, while the term "wire communication" is defined quite broadly, the term 'call' is a narrower term that is limited to "a normal circuit-switched connection between two telephone numbers."[59] It claims that, while the boundaries of a "communication" are relevant for jurisdictional purposes, the boundaries of a call are what matters for reciprocal compensation purposes, and that the two may be different.[60]

There are two overwhelming problems with this argument. First, the reciprocal compensation provisions of the Act do not apply to the transport and termination of "calls." They apply to the transport and termination of "telecommunications," which is a defined term. The meaning of "call," therefore, is irrelevant. Second, Global NAPs' claim that the concept of a "call" is somehow different from the concept of a "communication" is completely unsupported. The term "call" is nowhere defined in the Act or anywhere else for that matter. Global NAPs has simply made up its own definition.

Global NAPs nevertheless points out that Section 252(b)(2), which addresses reciprocal compensation pricing, refers to "calls." That, however, does not help its cause. To the contrary, the fact that Section 251(b)(5) refers to "telecommunications" while the pricing provision for reciprocal compensation refers to "calls" suggests, if anything, that Congress viewed the terms to be synonymous. Indeed, if all telecommunications are not calls, as Global NAPs claims, then

---

web cache servers, usenet news servers and email servers to which the end user is connected in those cases.

59 Global NAPs Comments at 24-25

60 *Id.* at 24.

Section 252(d)(2) establishes pricing rules for only a portion of the telecommunications to which Section 251(b)(5) applies.

Notably, Global NAPs observes that "attending to the statutory distinction between a 'call' and a 'communication' appears to be the only way to harmonize the D.C. Circuit's acceptance of the use of the end-to-end analysis for jurisdictional purposes (where the relevant statute refers to 'communications') with its unequivocal (and correct) holding that when an end user calls his or her ISP, the party being called is, indeed, the ISP[.]"[61] That might have been true if there were such a statutory distinction, but since there is not, it is *impossible* to reconcile the jurisdictional nature of ISP traffic with the notion that the ISP is the "called party" on an Internet communication.

d. The Fact That CLECs Incur Costs in Serving Their ISP Customers is Not, in Itself, Sufficient Grounds to Require Reciprocal Compensation for ISP Traffic.

One of the most common refrains in the CLEC comments is that they incur costs in serving their ISP customers; *ergo*, they are entitled to reciprocal compensation. Implicit in this argument is their assertion that, without reciprocal compensation, they would have no ability to recover these costs. As SBC showed above and in its Comments, that is simply untrue. CLECs have every ability to recover their costs from their ISP customers. But there is a deeper problem with this argument: the ILECs, as well, incur costs when they originate ISP traffic and haul it to the CLEC point of interconnection, particularly since the point of interconnection is often clear across the LATA or the state.[62] When the ILECs argued to the Commission that the access

---

61 *Id.* at 25.

62 *See* Global NAPs Comments at 2 (emphasis added): "ISPs must be accessible via a local call *throughout a wide area.*"

charge exemption prevented them from recovering the costs of providing Internet access, the Commission invited ILECs to petition the states for ISP rate increases. Those revenues are no longer available when a CLEC is serving the ISP.

SBC is not here urging the Commission to lift the access charge exemption. SBC recognizes that this is the "third rail" of telecommunications policy. But surely to the extent ILECs can no longer look to their ISP customers for full recovery, the Commission should not compound the problem by subjecting them to the additional cost of reciprocal compensation.

Some CLECs purport to dismiss this problem. They claim that ILECs are profiting "wildly" from the sale of second lines and that ILEC end user revenues recover the costs, not only of the originating functionality they provide, but of the "terminating" functionality that the CLEC provides.[63] This is nonsense.

First, their argument that reciprocal compensation simply reflects "avoided costs" is disingenuous, at best. As SBC noted in its Comments, any costs it avoids when a CLEC wins an ISP customer may well be exceeded by *increases* in originating switching and interoffice transport costs.[64] That is because, when SBC serves both the consumer and the ISP, a sizable percentage of Internet traffic can be handled on an "intra-switch" basis. In those instances – where the consumer and ISP are served by the same end office switch – SBC is spared the cost of establishing a trunk circuit at the originating switch and of transporting the calls over local interconnection trunks to the CLEC. In contrast, when a CLEC wins that ISP's business, *all* traffic must be routed over interoffice facilities to the CLEC's point of interconnection. These

---

63 *See, e.g., id.* at 3; AT&T Comments at n. 6; Focal Comments at 17-19.

64 SBC Comments at note 73.

additional costs can be considerable; they may even outweigh any avoided costs, particularly since SBC frequently must haul ISP traffic great distances before handing it off to the CLEC that is serving the ISP. That being the case, it is simply not true that this is a "zero sum game."

Second, local consumer rates do not, in any event, allow full recovery of the costs of Internet traffic. Ameritech demonstrated this in its April 12, 1999, Comments, when it submitted an analysis that showed, using existing TELRIC costs in each of its states (a conservatively low cost basis) and tariffed rates for second lines, that the revenues derived from a second line do not recover the costs of the *originating* function for an average Internet user, let alone the originating and terminating function.[65] Moreover, this study was overly conservative because it assumed that every Internet user purchases a second line, which, of course, is not even close to true.[66]

The CLECs' only response to this study bears no relationship to reality. They claim that local services are priced "based on the costs of serving a customer with *average* cost characteristics" so that any under-compensation for service to heavy users is made up through over-compensation from other users.[67] They claim, further that "[i]f a LEC believes that its retail rates are improperly structured to reflect its costs of originating calls, the LEC should seek permission to modify those rates."[68]

---

65 *See* Ameritech April 13, 1999, Comments at 8-10 and Attachment A.

66 Global NAPs and ICG claim that the costs associated with a second line are minimal and that any revenue received from those lines is pure gravy. Global NAPs Comments at 4; ICG April 27, 1999 Reply at 8. SBC refuted this very argument in a December 14, 1999 *ex parte* responding to a November 30, 1999 AOL *ex parte*. A copy of this response is attached.

67 AT&T Comments at n. 6, *citing* Declaration of Selwyn and Kravtin at para. 18.

68 AT&T Comments at 21.

But ILEC basic service rates were established long before the explosion of Internet traffic. The CLECs know full well that those rates do not reflect the costs of handling today's Internet loads. And they know full well that the *last* thing Congress had in mind when it adopted Section 251(b)(5) was for that provision to be construed so as to necessitate higher consumer rates or the elimination of flat-rated local calling. That these changes would likely affect non-Internet users along with Internet users makes them all the more indefensible.[69]

C. The Commission Should Establish a Bill and Keep Methodology for Internet Data Traffic or One of the Alternative Compromise Proposals Outlined by SBC.

In its Comments, SBC explained how reciprocal compensation for ISP traffic is antithetical to a number of key goals of the 1996 Act. It showed, in particular, that reciprocal compensation for ISP traffic reduces competition for residential consumers; slows the deployment of advanced services; skews investment incentives; distorts pricing of telecommunications and Internet services; co-opts competition among carriers for ISP business; and threatens to undermine the Internet policies that the United States is espousing in international fora.

Some CLECs attribute these problems entirely to the high reciprocal compensation rates in the initial interconnection agreements, which they blame on the ILECs. They claim that any

---

[69] *See* NTIA, *Falling Through the Net: Defining the Digital Divide,* at xiii – xiv (noting *inter alia* that: (1) households with incomes of $75,000 and higher are more than 20 times more likely to have access to the Internet than other households and more than 9 times as likely to have a computer at home; and (2) the gaps between white and non-white households is increasing.

past problems will be rectified as states establish more cost-based rates in the new round of interconnection agreements, and they say that this is precisely what is now happening.[70]

These arguments are unconvincing for a number of reasons. As an initial matter, they fail to address the issue of why a CLEC should enjoy a federal guarantee of full cost recovery when they serve an ISP while, in the *Access Reform Order,* the Commission declined to offer any such guarantee to ILECs. They also fail to address why ILECs should finance that guarantee when ILECs cannot recover even their own costs of originating ISP traffic, let alone the costs of reciprocal compensation.

But putting these issues aside, for the moment, a reciprocal compensation regime can *never* provide the correct level of compensation for ISP traffic unless reciprocal compensation payments: (1) reflect CLECs' actual costs; and (2) take into account ISP revenues so as to avoid double recovery. And even the lower reciprocal compensation rates that some states have established (over firm CLEC opposition) do not reflect CLEC costs, let alone the substantial revenues that are available from their ISP customers. To the contrary, these rates are based on the ILEC's cost of terminating local voice traffic.

Many CLECs claim that this difference is inconsequential. They assert that the "termination" functionality is the same both for Internet and voice traffic, and that the costs are, therefore, the same. These arguments are false. As SBC and Bell Atlantic explained in their Comments, the unique characteristics of Internet traffic (one-way calls of long duration), enable CLECs to serve their ISP customers at a far lower unit cost than are incurred by ILECs when they terminate local voice traffic. For one thing, CLECs can and do use different, less expensive equipment to serve their ISP customers. SBC *knows* this to be true because it is has received

---

[70] WorldCom Comments at 37; Time Warner Comments at 14-15.

interconnection requests for such equipment. Moreover, equipment vendors would not be manufacturing and marketing this equipment if there was no market for it. And certainly there is no reason to believe that a CLEC that is building its network from scratch would not use the most efficient equipment available in the marketplace. To the contrary, as Global NAPs admits, "CLECs, whose networks are not as mature as those of the ILECs, have engineered their networks from the outset with ISP usage patterns in mind." [71]

AT&T claims, though, that these efficiencies are available only to CLECs whose sole business is to serve ISPs. That is a specious argument. As SBC and Bell Atlantic show in their Comments, the incremental costs of delivering ISP traffic are less than the costs of terminating local traffic irrespective of the type of equipment used, simply because of the nature of the service provided. Thus even if a CLEC uses the same types of switches that ILECs use for the termination of local traffic, the *services* they provide over those switches are less costly. AT&T's argument also ignores that many – and probably most – CLECs allow their ISP customers to collocate. This practice – which is feasible only because of the unique characteristics of Internet traffic – enables CLECs to save significant transmission expenses.[72] In addition, call set-up

---

[71] Global NAPs Comments at 17. *See also* Time Warner Comments at 15: "Nor is there reason for regulators to be concerned that some CLECs have deployed network architecture that allows them to transport and terminate traffic to ISPs at a cost below the forward-looking reciprocal compensation rate."

[72] Yet even as CLECs avoid these transmission costs for a large portion of their ISP traffic, they typically demand that they be paid reciprocal compensation, not just at the end office switching rate, but at a rate that also includes tandem switching and transport cost elements. They demand (and generally receive) this additional unwarranted payment under the guise that such "symmetrical reciprocal compensation " payments are required by section 51.711(a)(3) of the Commission's rules.

costs, when calculated on a per-minute basis, are about one tenth of the cost of setting up a local call.[73]

Tellingly, while CLECs maintain that the costs of delivering Internet traffic to an ISP are no different from the costs an ILEC incurs when it terminates a local call, they steadfastly refuse to document their claims. Even as they collect tens, and in some cases, hundreds of millions of dollars in reciprocal compensation subsidies each year, they claim to be too small to actually have to demonstrate their costs. And, of course, they utter not a peep about their ISP revenues. These revenues, they claim, are irrelevant, even though the revenues provide compensation for the very same services for which they seek reciprocal compensation.

Thus CLEC arguments that lower reciprocal compensation rates will address the distortions in the marketplace ring hollow. They may temporarily reduce the size of the gargantuan subsidy received by CLECs – at least until the explosive growth of Internet minutes compensates for the lower per-minute rate – but they will not come close to eliminating these distortions.

The only way to eliminate the distortions associated with ISP traffic is to allow competition to dictate the rates paid by ISPs for their access services. And as SBC demonstrated in its Comments, the only way for that to happen is if the Commission adopts a bill and keep methodology for ISP traffic.

While a pure bill and keep approach is the best solution, the Commission could, in the interests of compromise, adopt one of the two alternatives proposed by SBC. Under one of those

---

[73] The call set-up expense is a one-time per-call cost. It is translated into a per-minute cost for reciprocal compensation purposes based on the assumption that a typical call lasts three minutes. Because a typical ISP connection lasts 30 minutes, these costs are over-recovered by ten times when the reciprocal compensation rate for local traffic is extended to ISP traffic.

alternatives, the Commission would condition the availability of bill and keep for Internet data traffic on the availability of bill and keep for local traffic as well. Under the other alternative, the Commission would limit Internet abuses by establishing a cap on the amount of "terminating" minutes a carrier may bill in relation to the amount of originating minutes it sends to the billed carrier.

Notably, for all their other virtues, these compromise proposals would address two of the concerns raised by CLECs in this proceeding – namely, that (1) if ISP traffic is not subject to reciprocal compensation, ILECs will once again raise reciprocal compensation rates; and (2) any proposal that would require segregation for billing purposes of ISP traffic would be extremely burdensome. Although, for the reasons stated in Ameritech's April 27, 1999 Reply, SBC believes these concerns are unwarranted,[74] they are, in fact, addressed by both of SBC's proposals. For example, if bill and keep for ISP traffic is conditioned on the availability of bill and keep for local traffic, ILECs could not seek excessive reciprocal compensation rates for local traffic, including wireless traffic (assuming they had any such ability in the first place). Likewise, because the second alternative would leave CLECs with a favorable (2:1) traffic imbalance, ILECs would have no incentive to seek excessive reciprocal compensation rates. By the same token, under either proposal, it would be unnecessary for any LEC to segregate ISP traffic from other traffic dialed with a seven-digit telephone number (unless a CLEC voluntarily opted out of the bill and keep option for local traffic). For these reasons, as well as in the

---

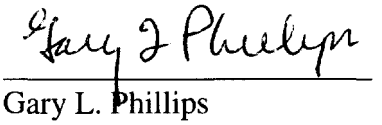
[74] *See* Ameritech Reply, April 27, 1999, at 15-17 (for a discussion of why reciprocal compensation rates would not increase if ISP traffic were not subject to reciprocal compensation) and at 22-23 (for a discussion of how ISP traffic could be distinguished for reciprocal compensation purposes from local traffic).

interests of compromise, the Commission may want to consider either of these proposals as an alternative to a pure bill and keep approach.

III. CONCLUSION

For the reasons discussed above and in SBC's Comments, the Commission should reaffirm its conclusion that ISP-bound Traffic does not terminate at the ISP server, is not local telecommunications traffic, and is, therefore, not subject to the reciprocal compensation provisions of the Act. It should hold further, both as a matter of law and policy, that Internet data traffic should be subject to a bill and keep methodology.

Respectfully Submitted,



Gary L. Phillips
Roger K. Toppins
Alfred G. Richter Jr.

SBC Communications Inc.
1401 Eye Street, NW
Suite 1100
Washington, D.C. 20005
202-326-8910

Its Attorneys

August 4, 2000

ATTACHMENT A

December 14, 1999

Ms. Magalie Roman Salas
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

RE: **Ex Parte Presentation**
CC Docket 99-68

Dear Ms. Salas:

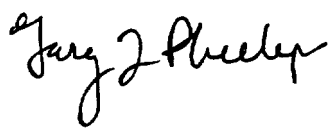
SBC Communications, Inc. respectfully submits the attached analysis by LECG, Inc. responding to a November 30, 1999, written *ex parte* submitted by America Online, Inc. (AOL) in the above-referenced proceeding. In its *ex parte,* AOL responded to a study submitted by Ameritech in its April 12 comments which showed that, even without inter-carrier compensation, and focusing exclusively on end users that have purchased second lines for Internet access, Ameritech does not recover its costs from end user revenues when originating ISP traffic.

In its *ex parte,* AOL claims that Ameritech's study overstates Ameritech's costs. As shown in the attached response, however, AOL's critique is based on a short-run marginal cost analysis that is wholly inconsistent with the TELRIC cost principles that have been adopted by this Commission and state regulators. Indeed, AOL's critique is inconsistent with the positions its authors have themselves espoused in regulatory proceedings. The critique also mischaracterizes Ameritech's cost studies, misquotes Ameritech's testimony in prior rate proceedings, and contains calculation errors.

Of course, as noted, Ameritech's study was limited to end users who have purchased second lines for Internet access, and it attributed *all* revenue from such lines to the origination of Internet traffic. In reality, most Internet consumers contribute no additional revenue when they access the Internet. Most consumers do not purchase a second line for Internet access and most pay flat-rated local rates on their primary line – rates that were set before the explosion of Internet usage. If these users had been considered in Ameritech's study, the disparity between Ameritech's costs and revenues would be even greater than that shown by Ameritech's study.

Since, as Ameritech's study demonstrates, incumbent LECs do not recover their costs in originating Internet traffic, there can be no justification for compounding their losses by requiring them to pay inter-carrier compensation on an ongoing basis for such traffic.

Sincerely,



Gary Phillips
General Attorney

Attachment

Response to HAI Consulting and Quantitative Solutions' Critique of Ameritech's Cost Study

Debra J. Aron, Ph.D.
William C. Palmer

LECG, Inc.

December 14, 1999

I. INTRODUCTION

In an ex parte filing dated November 30, 1999 in CC Docket No. 99-68, Daniel Kelley and Richard Chandler of HAI Consulting, Inc. and Gus Ankum of Quantitative Solutions, Inc. ("Respondents") respond to an analysis filed in comments by Ameritech on April 12, 1999 in the same docket. Ameritech's analysis shows that Ameritech does not recover its own costs when providing second lines to customers who use them exclusively to access the Internet. Respondents purport to show that Ameritech's analysis is defective and that second lines used for Internet access are, in fact, profitable.

Respondents' critique is flawed because it is based on a short-run cost analysis that is inconsistent with the TELRIC cost principles that have been adopted by federal and state regulators. As the Respondents are fully aware, the TELRIC methodology estimates average long-run costs, not marginal short-run costs. Ameritech relied on previously approved TELRIC estimates because TELRIC reflects existing regulatory requirements. Indeed, Respondent Ankum's previous testimony and HAI Consulting's cost model (the HAI Model, Version 5.1) advocate and incorporate long-run costing methods.

Not only do the Respondents depart from existing regulatory cost standards, but they also mischaracterize Ameritech's cost studies and its testimony in prior rate proceedings. They also commit calculation errors and, although not central to their analysis, misleadingly assert that Ameritech has not accounted for cost "savings" enjoyed when CLECS win ISP customers.

II. SECOND-LINE TELRIC COSTS ARE NOT LOWER THAN FIRST-LINE COSTS

In their "corrected" version of Ameritech's cost study, the Respondents reduce the cost of the second line included in Ameritech's April 12,1999 analysis by 75%, arguing that the analysis overstates the cost of second lines since "the costs for certain facilities are already included in the costs of the first line."[1] The Respondents' assertion is incorrect. In simple terms, TELRIC is an *average* cost long-run cost methodology. That is, TELRIC calculates unit network access line costs by dividing the total forward-looking cost of all lines (including spare capacity) required at any point in time by the total demand for lines at that same point in time. Because TELRIC is an average cost methodology, there is no distinction between the cost of a second line and the cost of a first line: the TELRIC rate is based on the average cost of all lines.

The second-line loop costs reflected in Ameritech's study were based on these TELRIC principles. Specifically, Ameritech modeled a forward-looking network designed to serve all network access line demand at the lowest overall cost. The model takes into account the fact that some customers will purchase more than one line and designs the network accordingly. The model then divides these costs by the total number of lines in use, including second lines. Respondents ignore the fact that the demand component of a

---

[1] Kelley, Chandler, and Ankum, "Response to Ameritech's Internet Cost Analysis," *ex parte* presentation before the Federal Communications Commission, CC Docket No. 99-68, November 30, 1999, p. 3.

TELRIC study includes the substantial number of second lines already in use. Thus, second-line usage is already factored into the average per-line cost.

Respondents claim, nevertheless, that Ameritech's true costs of providing service over a second line should be calculated with reference to a short-run cost methodology because the costs of spare capacity are included in the TELRIC cost model. Aside from being inconsistent with regulatory cost principles, this critique is flawed because it assumes that second lines can be perpetually served out of existing spare capacity, without any need in the long-run for maintaining required levels of spare capacity. They cannot. As demand grows, the network must be reinforced with additional used capacity and additional spare capacity. Indeed, even on a short-run basis, Respondents' analysis is flawed because it incorrectly assumes that spare capacity is readily available at all times and in all places. That is simply not the case. For example, we understand that in many areas of California, the demand for additional lines has outstripped SBC's spare capacity and SBC has had to add capacity in its loop plant before processing orders for additional lines.

Ironically, the Respondents' HAI model uses the same long-run costing principles that the Respondents now eschew.[2] Moreover, just eight months ago, Respondent Ankum himself acknowledged that a short-run marginal cost approach is inconsistent with TELRIC:

> "The essence of TSLRIC/TELRIC is that it captures all costs that a firm incurs in the long run in the provision of unbundled network elements. By contrast, short-run marginal costs would consider only the additional costs incurred by a company in providing network elements. For example, the short-run marginal costs of providing unbundled loops to Ameritech would exclude the capital costs for those loops that already exist and consider only the ongoing maintenance expenses of maintaining the loop. Obviously, the short-run marginal cost of providing unbundled loops is, in general, much lower than the TSLRIC/TELRIC costs."[3]

The above precisely describes the short-run network access line costs that the Respondents have asserted should replace the various state Commission-approved TELRIC estimates used in Ameritech's original April 12,1999 second line

---

[2] Page 36 of The HAI Model, Release 5.1's Inputs Portfolio states that "[b]ecause the model calculates the unit loop investment cost as the total loop investment (including spare capacity), divided by the current loop demand, the resulting unit costs are a conservatively high estimate of the economic cost of meeting current loop demand. This occurs because, in reality, some of the spare distribution plant can and will be used to satisfy additional loop demand in the future, without causing any additional investment cost, thus a larger number of customers will pay for the cable over time." In addition, the output of the HAI model reflects average loop costs. It makes no distinction between first and second lines.

[3] Michigan Public Service Commission. *Affidavit of Dr. August Ankum*, Case No. U-11831, April 1, 1999, p. 14.

profitability analysis.[4] The above also reveals the reason for the substitution. That is, the revised analysis contrived by the respondents is obviously results-driven, and the use of short-run marginal costs that are generally "much lower than the TSLRIC/TELRIC costs" supports the Respondents' desired outcome.

Dr. Ankum has also argued that, as an average cost concept, TELRIC is preferable to the short-run methodology he now purports to embrace:

> "The Commission should realize that the TSLRIC/TELRIC methodology sometimes overestimates Ameritech's actual costs (as discussed above) and sometimes it underestimates those actual costs. However, on average, in the long run, TSLRIC/TELRIC captures all efficiently incurred costs better than any other cost methodology. In view of this, it would be inappropriate for the Commission to allow Ameritech to mix TSLRIC/TELRIC and short-run costing methodologies ...
>
> "In short, *the [Michigan] Commission should mandate a rigorous adherence to the TSLRIC/TELRIC methodology*, consistent with the Commission's own TSLRIC rules and the FCC's Local Competition Order."[5] (emphasis in original)

In this case, the FCC should disregard the short-run second line cost estimates put forth by the Respondents.

III. THE RESPONDENTS' MODIFICATIONS TO AMERITECH'S SWITCHING COSTS ARE MISLEADING, INACCURATE, AND REPRESENT A SHORT-RUN VIEW OF COSTS

A. Switching Costs are Usage-Sensitive in the Long Run

The Respondents argue that Ameritech's analysis is flawed because it assumes that "usage costs increase linearly with usage." Hence, they argue, Ameritech has "greatly overstated" the usage-sensitive costs related to Internet usage. Their argument is based on the fact that there are no usage-sensitive components explicit in the contracts Ameritech has with its switch vendors.

It is correct that Ameritech's current switch-vendor contracts do not explicitly include a usage-sensitive component. Nevertheless, it would be incorrect to infer that Ameritech's true forward-looking cost of providing service is genuinely independent of customers' usage. The prices Ameritech pays for its switches are based on assumptions about the capacity requirements of those switches. For example, vendors will assume that a switch with ten thousand line ports requires a certain amount of capacity, and they will price the

---

[4] Kelley, Chandler, and Ankum, "Response to Ameritech's Internet Cost Analysis," *ex parte* presentation before the Federal Communications Commission, CC Docket No. 99-68, November 30, 1999, p. 4.

[5] Michigan Public Service Commission, *Affidavit of Dr. August Ankum*, Case No. U-11831, April 1, 1999, p. 20-21.

switch accordingly. The fact that the price is quoted on a per-line basis simply reflects the way the costs of the switch are recovered by the vendor; it does not suggest that usage is irrelevant to actual switching costs.

With the explosion of Internet usage, the assumptions that underlie switch vendors' calculations of Ameritech's per-line cost per switch are rapidly becoming outmoded. A switch with 10,000 line ports today must have substantially more processing capacity than was previously necessary. Accordingly, the vendor-quoted cost per line port is likely to be increased to reflect the explosion of Internet usage. We understand that Ameritech is currently in discussions with its switch vendors regarding precisely this issue.

The Respondents inaccurately imply that Ameritech has recognized that the switch is not itself usage-sensitive, citing a quote from Dr. Aron's 1998 testimony in Illinois as support. In citing that passage, however, they neglected to include the entire paragraph from which it was drawn. In that paragraph, Dr. Aron went on to describe how customers whose usage exceeded a standard threshold do induce additional switching costs. As Dr. Aron stated in her testimony,

> "[I]f a customer's usage exceeds [a] normal usage level, however, that customer contributes (in a probabilistic sense) to the cost of the additional switching capacity that is rendered necessary. Hence, again consistent with economic cost-causation principles, usage above the normal usage threshold should invoke additional, usage-based charges."[6]

Quite the contrary to Respondents' claims, Dr. Aron's advocacy has consistently recognized that switching costs are indeed usage-sensitive in the long run.

B. The Respondents' "Corrections" to Ameritech's Switching Costs are Conceptually Flawed

To "correct" for the claimed deficiencies of Ameritech's cost estimates, the Respondents provide two "adjusted" cost studies. In the first, they make two adjustments to Ameritech's usage cost. First, they lop off an arbitrary 20% of Ameritech's estimated per-minutes usage cost to account for the alleged fact that "Ameritech has only used *lower* growth discounts and not *higher* cutover discounts in its switch cost studies."[7,8]

---

[6] Illinois Commerce Commission, C.C. Docket No. 96-0486/96-0569 (Consol.), *Direct Testimony of Debra J. Aron on Behalf of Ameritech Illinois*, March 24, 1998, p. 7.

[7] Kelley, Chandler, and Ankum, "Response to Ameritech's Internet Cost Analysis," *ex parte* presentation before the Federal Communications Commission, CC Docket No. 99-68, November 30, 1999, Attachment 1, footnote.

[8] Ameritech's current vendor contracts provide one per-line price for lines on new, replacement switches (called "cutover" lines), and a different, higher, price for additional lines to existing digital switches (called "growth" lines).

Second, they arbitrarily apply the usage cost to only 3.5 minutes of the call, rather than the entire 26 minutes of the average duration of an ISP call – an "adjustment" which drives their results. Their justification for this modification is their claim that "the End Office usage costs are the same whether the call lasts 3.5 minutes (the average duration for normal calls) or 26 minutes (the average ISP call)."[9] These assumptions in combination result in a usage cost per 26-minute call that is significantly lower than even the cost estimates produced by their own HAI model.[10]

The Respondents' first claim, that is it appropriate to decrease Ameritech's estimated cost by 20% because Ameritech does not account for the discount on cutover lines, is based on a faulty premise. In particular, whereas Respondents assume that Ameritech based its analysis on the ARPSM model, which is Ameritech's new switching cost model that was designed to reflect its per-line vendor contracts, the analysis was, in fact, based on the SCIS model. The reason that Ameritech used the SCIS-based costs is that it was being conservative by using only costs that have already been approved (and adjusted) by the state commissions. The ARPSM model is intended to ultimately replace SCIS. However, ARPSM has not yet been fully vetted or approved by the state commissions. The discount structure that was used by SCIS to produce the numbers in Ameritech's study is unrelated in any way to the cutover and growth discounts in Ameritech's current vendor contracts.

In any event, Respondents' adjustment would be wrong even if Ameritech had used the ARPSM model, because they are incorrect in asserting that Ameritech's ARPSM model uses only the growth prices and not the cutover discounts. As Dr. Ankum is well aware from his extensive involvement in recent cost proceedings in Illinois and Michigan, Ameritech's ARPSM model determines costs by calculating a meld of cutover and growth line costs. In other words, contrary to the completely erroneous assertions of the Respondents,[11] the model reflects *both* the cutover- and growth-line costs.

Respondents' second adjustment is to apply their "adjusted" per-minute usage cost figure to a 3.5 minute call, rather than a 26 minute call. Their justification for their completely ad hoc adjustment is that they believe that the end office usage costs on a 26 minute call are the same as the end office usage costs on a 3.5 minute call. There are, however,

---

[9] Kelley, Chandler, and Ankum, "Response to Ameritech's Internet Cost Analysis," *ex parte* presentation before the Federal Communications Commission, CC Docket No. 99-68, November 30, 1999, Attachment 1, footnote.

[10] Although neither Respondents' analyses nor our corrections to their analyses in our Attachment 1 explicitly calculate a per-call cost, it is clear that dividing the lower costs yielded by this "non-usage-sensitive" method by ninety calls per month will yield a lower result than dividing the higher costs per month produced by the HAI inputs by ninety calls per month.

[11] Kelley, Chandler, and Ankum, "Response to Ameritech's Internet Cost Analysis," *ex parte* presentation before the Federal Communications Commission, CC Docket No. 99-68, November 30, 1999, p. 6.